

corneal haze, steroids as the species and dexamethasone as the ultimate species. Claims 6-24 are withdrawn, Applicants reserving the right to further prosecute said claims in continuing or divisional applications. Claims 1-5 are pending.

Applicants respectfully request the application be amended to indicate that this application is a continuation-in-part of the earlier filed pending application, Serial No. 253,009, filed October 3, 1988, which is now U.S. Patent No. 4,939,135. This fact was set forth in the Declaration and Power of Attorney filed with the present patent application. Applicants also request that the filing receipt be corrected to reflect this fact.

Claims 1-5 stand rejected under 35 USC Section 101 as claiming the same invention as that of Claims 1-3 of prior U.S. Patent No. 4,939,135. Applicants respectfully traverse the rejection.

Respectfully, Claim 1 of U.S. Patent No. 4,939,135, the parent of this case, is directed to a method for treating corneal haze as an artifact of incident UV laser irradiation and resulting photoablation of the corneal tissue comprising topically applying a therapeutically effective amount of a steroid. Claim 1 of the present invention is not limited to UV laser irradiation, but encompasses the treatment of corneal haze resulting from any incident laser irradiation. Applicants respectfully request reconsideration.

Claims 1-5 have also been rejected under 35 USC 103 as being unpatentable over Sanchez et al. or Gurinder Singh. Applicants respectfully traverse the rejection.

Sanchez et al. does teach that the use of dexamethasone will delay the corneal endothelial healing rate. They also disclose that the use of steroids may possibly allow for prevention of excessive endothelium proliferation in response to persistent injury or inflammation, such as in graft rejection, by regulating

the pattern or healing, and inhibiting formation of retrograph membranes, see page 22, first full paragraph. Singh, as disclosed in the specification, is an example of a reference which teaches that steroids are known for their role in controlling inflammation and inhibiting wound healing. Specifically, Singh does disclose that cortocosteroids have an inhibitory effect on corneal endothelial wound healing.

The Examiner has contended that the corneal haze to be treated according to the methods of the present invention is the result of excessive endothelial cell proliferation. Applicants respectfully disagree with the Examiner's contention.

The Applicants have stated that the haze, which has not been observed as a result of ophthalmic surgery until the advent of the use of lasers, is seen in different parts of the cornea, but particularly the stroma (Specification, p. 3) not the endothelium as suggested by the Examiner. In the specification, Applicants have set forth several theories as to why corneal haze may appear. These theories include, that the corneal haze is a scar resulting from actual wound repair taking place after photoablation of the cornea, that fibroblasts of the stroma may be improperly activated in response to the laser, that the radiation emitted by the laser may damage collagen fibers resulting in improper alignment, that the laser may kill or damage fibroblasts in the stroma, and that the corneal haze may result from corneal edema which occurs following photoablation (Specification, pp. 6 and 7). The Applicants have not suggested, nor are they aware of any evidence or suggestion that the corneal haze is the result of excessive endothelial cell proliferation. It is known that the endothelial layer is only a single cell in depth and infrequently, if ever, replaced as a normal process in adult life. Disruption of the endothelium leads to its failure to perform fluid transport functions resulting in corneal thickening and visual clouding due to improper fluid balance in the stromal layer of the eye. This type of clouding is not the same as the haze as described in the present application.

Applicants respectfully request reconsideration.

Wherefore, Applicants claims are in condition for allowance and notice thereof is requested.

Respectfully submitted,  
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March 7, 1991  
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Docket No. 1118A